

**Attorney Docket: GRA26 009  
Application Serial No.: 10/531,038  
Amendment dated: November 30, 2006**

## **REMARKS**

Claims 1, 2, 4-6, 9-10, 12-24, 26-35 are currently pending in the application. No new matters were added.

Claim 1 has been amended incorporating the subject matter of Claim 7.

Claims 12 and 13 have been amended into independent form incorporating the features of Cancelled Claim 11.

Claims 3, 7, 8, 11 and 25 have been cancelled.

## **OBJECTIONS**

Claim 25 has been cancelled rendering the Objection moot.

## **REJECTIONS**

### 112 2<sup>nd</sup> rejection

Claim 26 has been amended rendering the rejection under 112 2<sup>nd</sup> moot.

### Anticipation

Claims 1-2, 4-6, 9-23 and 26-29 are improperly rejected under 35 U.S.C. 102(e) as being anticipated by Stein et al. (US Patent Appl. 2003/0008663).

Claim 1, which contains the subject matter of original Claim 7 recites “wherein plural signals are received from the mobile appliance by the geolocation system and the

step of determining if one of the plural signals has passed through the first repeater is based in part on a difference between the times of arrival of two of the plural signals at the geolocation system.

The Office incorrectly states “the step of determining if one of the plural signals has passed through the first repeater is based in part on a difference between the times of arrival of two of the plural signals at the geolocation system” and cites Sections 28, 45-47 and 102-104 as a basis. The Applicant submits that there is not disclosure of using a time difference to determine if one of the plural signals has passed through a repeater.

Section 0028 merely reminisces about using GPS satellites to locate a terminal.

Sections 45-47 merely describes PN sequence cycle offsets where the PN sequence may have a different starting point in the continuously repeated sequence.

Sections 102-104 describes receiving signals from the base stations, GPS satellites and the identifier PNs for the repeaters, which is how Stein determine is the signal has gone through a repeater.

Stein DOES NOT disclose time differences in plural received signals is used to determine if a signal has passed through a repeater in the entire specification much less in the cited portions. Stein uses an Identification code such as a PN sequence to determine if a signal passes through a repeater and any reading of Stein that attempts to depart from this is clearly in error.

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This rejection must be withdrawn.

Likewise Claims 2, 4-6, 9 and 10 which depend from Claim 1, are not anticipated by Stein irrespective of the additional patentable features recited therein.

Claim 12 recites *inter alia* “the geolocation sensors monitor the tether between the at least one repeater and an antenna feed interface for the mobile appliance’s signal”

NOWHERE does Stein disclose the geolocation sensor monitoring the tether, much less monitoring the tether between the antenna feed interface and the repeater. In fact the Office acknowledges such and states “Stein fails to clearly teach a geolocation sensor” OA 7/31/06 page 10.

The rejection of claim 12 as being anticipated by Stein is improper and must be withdrawn.

Likewise the rejection of Claims 14-17 which depend from Claim 12 is also improper irrespective of the additional patentable features recited therein.

Claim 13 recites *inter alia* “adjusting the time of arrival of the mobile appliances signal based on the determination if the mobile appliance is being served by the one of the at least one repeaters.”

NOWHERE does Stein disclose adjusting the time of arrival of a mobile appliance much less based on the determination of a mobile be served by a repeater. The portion cited by the Office only describes problems associated with locating mobiles served by

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repeaters. Furthermore as noted above Claim 13 requires a plurality of geolocation sensors which the Office has acknowledged Stein does not disclose.

The rejection of Claim 12 as being anticipated by Stein is improper and must be withdrawn.

Likewise the rejection of Claims 18-21 which depend from Claim 13 is also improper irrespective of the additional patentable features recited therein.

Claim 22 recites *inter alia* using a known delay attributed to the communication tether and the respective at least one repeater station to determine the location of the target mobile.

Again NOWHERE does Stein disclose using a known delay of a repeater to determine the location of a target mobile. Stein identifies a repeater and approximates the repeaters location as that of the target mobile.

The rejection of claim 22 as being anticipated by Stein is improper and must be withdrawn.

Likewise the rejection of Claim 23 which depends form Claim 22 is also improper irrespective of the additional patentable features recited therein.

Claim 26 recites *inter alia*: “relaying from the at least one repeater station information regarding the channel of the mobile appliance’s signal to a geolocation

system and using the information to detect the mobile appliance's signal and calculate the mobile appliance's location."

Stein does not disclose what the Office purports it to disclose.

Stein discloses "the identification codes can be transmitted on a "dummy" channel" section 0106. This is not a disclosure of a translating repeater and is not a disclosure for indicating a channel on which the repeater received the mobile appliances signal.

The rejection of claim 26 as being anticipated by Stein is improper and must be withdrawn.

Likewise the rejection of Claim 27-29 which depend form Claim 26 is also improper irrespective of the additional patentable features recited therein.

**Obviousness**

Claims 24 and 30-33 are improperly rejected under 35 U.S.C. 103(a) as being unpatentable over Stein et al. (US Patent Appl. 2003/0008663) in view of Kennedy et al. (US Patent Appl. 2004/0043775).

As noted above Stein cannot anticipate Claim 22 from which Claim 24 depends. Kennedy is used by the Office to provide a mobile positioning center. However Kennedy fails to obviate the deficiencies of Stein with respect to Claim 22. Thus the combination of Stein and Kennedy cannot render Claim 24 unpatentable.

Amended Claim 30 recites *inter alia* “using the first signal received from the mobile appliance at each of the plural base stations to determine the location of the mobile appliance and disregarding a second signal received from the mobile appliance at each of the plural base stations when determining the location of the mobile appliance.”

As noted in the specification, a signal received directly from a mobile appliance most likely will arrive before a signal relayed by a repeater due the inherent delay. Therefore in determining the location of the mobile appliance, using the first signals received at a base station for the location determination will likely preclude a repeated signal and its deleterious time delay from being used.

There is simply no teaching in Stein or Kennedy for using only the first signal received from the mobile appliance in determining the location of the mobile and disregarding a second signal.

The rejection of Claim 30 is improper and must be withdrawn.

Likewise the rejection of Claim 31-33 which depend from Claim 30 is also improper irrespective of the additional patentable features recited therein.

Claim 34 is improperly rejected under U.S.C. 103(a) as being unpatentable over Stein et al. (US Patent Appl. 2003/0008663) in view of Bloebaum (US Patent Appl. 6,188,351).

Claim 34 recites *inter alia* “a gelocation sensor attached to the communication tether between said base station and said repeater station”.

The Office Acknowledges that “Stein fails to clearly teach a geolocation sensor”. In an attempt to correct this deficiency the Office states the Bloebaum teaches a geolocation sensor GPS attached to the base station. The Office suggests the GPS sensor could estimate the position of the terminal based on identification codes to reduce latency.

The Office is fundamentally mistaken.

First, the claim recites a gelocation sensor attached to a communication tether, not a base station. Secondly the sensor is attached between a base station and a repeater; there is no disclosure in either Stein nor Bloebaum for such an attachment location. Lastly the GPS sensor shown in figure 1a of Bloebaum communicates with a satellite and cannot be used to monitor a communication tether. Specifically as disclosed in Bloebaum “The MLC14 likely will receive the assistance in the form of ephemeris and clock correction data. Two possible sources for this information are shown. One source is a reference GPS receiver that communicates directly with the MLC 14. This reference GPS receiver 16 acquires the visible GPS signals and demodulates the transmitted navigation messages, which contain the ephemeris and clock corrections for the respective satellites.” Col. 8 ,ll. 28-36

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How is the sensor taught in Bloebaum estimate the position of a mobile appliance based on identity codes as the Office suggests?

Stein and Bloebaum alone or in combination fail to show, teach or suggest each of the elements of Claim 34 and thus cannot render Claim 34 unpatentable. The rejection must be withdrawn.

Claim 35 is improperly rejected under 35 U.S.C. 103(a) as being unpatentable over Stein et al.(US Pat Appl. 2003/0008663) in view of Bloebaum (US Patent 6, 188,351) and further in view of Kennedy et al. (US Patent Appl. 2004/0043775)

Claim 35 recites *inter alia* “wherein said tether is connected to said base station at antenna feed interface and said geolocation sensor is located on said tether prior to said interface.

The Office has again failed to consider each of the claim features. Where in either Stein, Bloebaum or Kennedy is an antenna feed interface taught? Where in either Stein, Bloebaum or Kennedy is a geolocation sensor taught to be connected to a tether? Where in either Stein Bloebaum or Kennedy is a the location of the connection prior to the antenna feed interface taught? The Answer is nowhere.

Neither Stein, Bloebaum nor Kennedy alone or in combination teaches all the features recited in Claim 35 and therefore cannot render Claim 35 unpatentable.

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## CONCLUSION

The Offices representations of the cited references are not consistent with the references themselves. The limitations of the Claims have not been met by the cited references alone or in combination. The Applicant request allowance of the application including Claims 1, 2, 4-6, 9-10, 12-24, 26-35.

If the Examiner has any questions relating to this response or the application in general she is respectfully requested to contact the undersigned so that prosecution may be expedited.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to **Deposit Account No. 04-1679**.

Respectfully submitted,

  
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